## PATENT COOPERATION TREATY

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY Eisenfuehr, Speiser & Partner Martinistrasse 24 WRITTEN OPINION EISENFÜHR. SPEISER & PARTNER D-28195 Bremen EINGEGANGEN/RECEIVED ALLEMAGNE (PCT Rule 66) 13. April 2004 BREMEN Date of mailing **FRIST** bas 13.04.2004 (day/month/year) Applicant's or agent's file reference within 3 month(s) REPLY DUE from the above date of mailing MA 7452-0100 Priority date (day/month/year) International filing date (day/month/year) international application No. 18.03.2002 17.03.2003 PCT/JP 03/03140 International Patent Classification (IPC) or both national classification and IPC C07K14/47 Applicant MATSUSHITA ELECTRIC INDUSTRIAL CO. LTD. et al. This written opinion is the second drawn up by this International Preliminary Examining Authority. This opinion contains indications relating to the following items: 2.  $\square$ Basis of the opinion Non-establishment of opinion with regard to novelty, inventive step and industrial applicability 111 Lack of unity of invention Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability;  $\boxtimes$ citations and explanations supporting such statement Certain documents cited Certain defects in the international application VII Certain observations on the international application VIII The applicant is hereby invited to reply to this opinion. 3. See the time limit indicated above. The applicant may, before the expiration of that time limit, When? request this Authority to grant an extension, see Rule 66.2(d). By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. How? For the form and the language of the amendments, see Rules 66.8 and 66.9. For an additional opportunity to submit amendments, see Rule 66.4. Also: For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66.6.

Name and mailing address of the international preliminary examining authority:



European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465

The final date by which the international preliminary

Authorized Officer

Gabriel, C

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

examination report must be established according to Rule 69.2 is: 18.07.2004

Formalities officer (incl. extension of time limits) Atienza Vivancos, B Telephone No. +49 89 2399-7891



l.	Basis	of	the.	op	inion

1. With regard to the **elements** of the international application (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"):

Į	Descri	ption, Pages			•			
	1-38		as originally filed		•			•
		•		•		•	. *	
	Claims	s, Numbers						
	1-19, 2	<b>11</b> ·	received on 16.02.2004	with letter of	16.02.2004			
	20	• •	received on 24.03.2004	with letter of	23.03.2004			
		•			•	•		
	Drawii	ngs, Sheets		v				•
	17-77		as originally filed					
	-	•	ull the elements marked ab	ove were ava	ailable or furnisl	ned to this	Authority	in the
2.	With re	egard to the <b>language</b> , a	ıll the elements marked ab onal application was filed,	unless other	wise indicated ι	inder this it	em.	
	-	lanto wore available	e or furnished to this Autho	rity in the foll	owing language	e: , whic	h is:	٠,
	These	elements were available	on furnished for the purpo	ses of the inte	ernational sear	ch (under F	Rule 23.1	(b)).
	☐ th	ne language of a translati	on furnished for the purpo	cation (under	Rule 48.3(b)).		•	
	☐ th	ne language of publicatio	n of the international application furnished for the purpo	ses of interna	ational prelimina	ary examin	ation (un	ider
		i - FF O and Of his 31			i i			
3.	With	regard to any <b>nucleotide</b> national preliminary exam	e and/or amino acid sequ ination was carried out on	ence disclos the basis of	ed in the intern the sequence li	ational app sting:	noation,	
		contained in the internation	onal application <u>i</u> n written f	orm.				· · · · · · · · · · · · · · · · · · ·
		iled together with the inte	ernational application in co	mputer reada	able form.	•		
	П .	turnished subsequently to	o this Authority in written fo	orm.				
	•		Authority in compute	er readable 10	orm.			
	· 🗆 ·	The statement that the s	ubsequently furnished writ	ten sequence rnished.	s listing does no	ot go beyon	ia the ais	CIOSUTE
		in the international applic	nformation recorded in con	nputer readal	ble form is iden	tical to the	written s	equenc
		The statement that the Ir listing has been furnishe	d.					
2			ted in the cancellation of:					
			ges:	:				
		•	os.:			•		
		the claims,	eets:					
		the drawings, sh	ec		onts had not be	en made.:s	since the	y have
	5. 🗆	This opinion has been a been considered to go	established as if (some of) beyond the disclosure as f	tne amendm iled (Rule 70	.2(c)).			
	6. Add	ditional observations, if n						

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Claims

Inventive step (IS)

Claims

Industrial applicability (IA)

Claims

2. Citations and explanations

see separate sheet

## Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The following documents (D1-D2) are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: BECK A, HOFMANN M: 'IRML: A Rule Specification Language for Intermediate Services; Version 02' IETF INTERNET DRAFT, [Online] 21 November 2001 (2001-11-21), pages 1-27, XP002256751 Retrieved from the Internet: <URL:www.globecom.net/ietf> [retrieved on 2003-09-30]

D2: SRISURESH P ET AL: 'Middlebox communicatin architecture and framework;' INTERNET ENGINEERING TASK FORCE, XX, XX, 28 February 2002 (2002-02-28), pages 1-35, XP002211545

- With the new set of claims filed with letters dated 16.02.2004 and 23.03.2004, received on 16.02.2004 and 24.03.2004 respectively, the applicant amended the subject-matter of claims 1-21 on file. As a result of these amendments, the objections made during the search procedure in respect of lack of unity (Rule 13 PCT) have been overcome.
- The subject-matter of claims 1, 17 and 21 are new and involve an inventive step 3. for the following reasons:
- 3.1 Document D1, which represents the most relevant prior art, discloses according to part of the features of claim 1,

a network control framework apparatus for controlling resources at an intermediate network element connecting two or more communications networks (abstract) comprising:

a gateway module providing gateway functionality ("intermediary device" on

page 4, par. 3),

- b) a rule engine module to perform network resource control decisions based on specified rules ("rule processor" on page 4, par. 3), wherein the rules are specified in a rule specification format ("XML" on page 4, par. 5) hereafter referred to as a Rule Specification,
- c) at least one special package added on to the rule engine module ("IRML-specified rules" on page 4, par. 3) offering specialized functionality to the rule engine module,
- d) a rule injection module ("rule processor" in section 4. and 4.1) to inject or remove Rule Specification to or from the rule engine module (section 4.1), and
- e) a means for distribution of said Rule Specification to at least one intermediate network element ("mechanism for transferring IRML rule files to intermediary devices" on page 4, par. 6) comprising:
  - i) means for distribution of indications in the Rule Specification to indicate that part or whole of the Rule Specification is to be distributed ("property" element on page 11, paragraph 5 and 6).
  - iv) means for identifying the target network element to distribute part or whole of a Rule Specification [to] ("rule" element in section 3.5.1),
  - vi) means for retrieval of the part or whole of Rule Specification distributed to the target network element from the intermediate network element that distributes the part or whole of Rule Specification ("transferring IRML rule files to intermediary devices" on page 4, par. 6).
- 2.2 The subject-matter of claim 1 differs from the disclosure of Document D1 in that:

the means for distribution of said Rule Specification comprises:

- ii) means for distribution of a signature embedded into data packets to announce the capabilities of the intermediate network elements the data packet traversed,
- iii) means for parsing the Rule Specification to determine if part or whole of the Rule Specification is distributed,
- v) means for distribution of a signaling embedded into data packets to inform target network element of the distribution of part or whole of Rule Specification,

- 2.3 The problem to be solved by the present invention is therefore regarded as determining automatically which of a number of intermediate network elements is capable of performing a Rule Specification, and which of the intermediate network elements the Rule Specification should be distributed to.
- 2.4 When confronted with this problem, the skilled person would not solve the problem based on his common general knowledge or by using the prior art cited in the search report by adding the additional features of claim 1, especially since neither of the cited documents addresses the problem identified above or discloses or suggests to use a signature announcing the capabilities of an intermediate network element.

Hence, the skilled person would not be prompted to include the additional features of claim 1 in the apparatus of document D1. As a consequence, claim 1 appears to meet the requirements of Articles 33(1)-(3) PCT in respect of novelty and inventive step.

- 2.5 Independent method claim 17 and independent system claim 21 correspond to claim 1, whereby all the features of claim 1 are represented by a corresponding feature in claim 17 and 21. Hence, these claims also appear to meet the requirements of Articles 33(1)-(3) PCT in respect of novelty and inventive step.
- 2.6 Since dependent claims 2-16 contain all the features of claim 1, and claims 18-20 contain all the features of independent claim 17, these claims also appear to meet the requirements of Articles 33(1)-(3) PCT in respect of novelty and inventive step.
- 3. The present application does not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined. The reasons are the following:
- 3.1 The category of claim 9 and 11 is not clear, because some of the features relate to a method of using the apparatus ("sends", "accepts", "is set up", "starts transmitting", "may transmit" in claim 9; "is used" in claim 11), rather than clearly defining the apparatus in terms of its structural features. The intended limitations are therefore not clear from these claims (PCT Guidelines III-4.1).

- 3.2 The antecedent is missing for "the data format" in claim 6.
- 4. In addition, the following requirements should be attended to in the amended application to be filed:
- 4.1 To meet the requirements of Rule 6.3 (b) (i) and (ii) PCT, newly filed independent claims should be properly cast in the two part form, with those features which are part of the prior art (see document D1) being placed in the preamble.

If the applicant is of the opinion that a two part form of the claim would be inappropriate he is invited to provide reasons in his reply (see Guidelines III-2.3a PCT).

4.2 In order to indicate more completely the background art useful for understanding the invention, the above-mentioned documents D1-D2 should be acknowledged in the description (Rule 5.1 (a) (ii) PCT).

The applicant should also indicate in the letter of reply the difference of the subject-matter of the new claim vis-à-vis the state of the art and the significance thereof.

- 4.3 When filing amended claims the applicant should at the same time bring the description into conformity with the amended claims (Rule 5.1 (a) (iii) PCT).
- 4.4 Due to the extent of the amendments, the applicant is requested to provide a typed or printed version of the amended claims (Rule 11.9 PCT).
- 4.5 In amending the application care should be taken not to extend the content of the application beyond that of the application as filed, by the addition or deletion of subject-matter, in order to meet the requirements of Articles 19 (2) and 34(2) (b) PCT.

Moreover, in order to expedite the procedure the applicant is requested to indicate with his reply the locations in the application as originally filed of the passages forming a basis for any amendments which are made. If the applicant regards it as appropriate, these indications should be submitted in handwritten form on a copy

## WRITTEN OPINION SEPARATE SHEET

of the relevant parts of the application as filed.

The applicant is requested to file amendments by way of replacement pages. He should also take into account the requirements of Rule 66.8 PCT. In particular, fair copies of the amendments should be filed in triplicate.